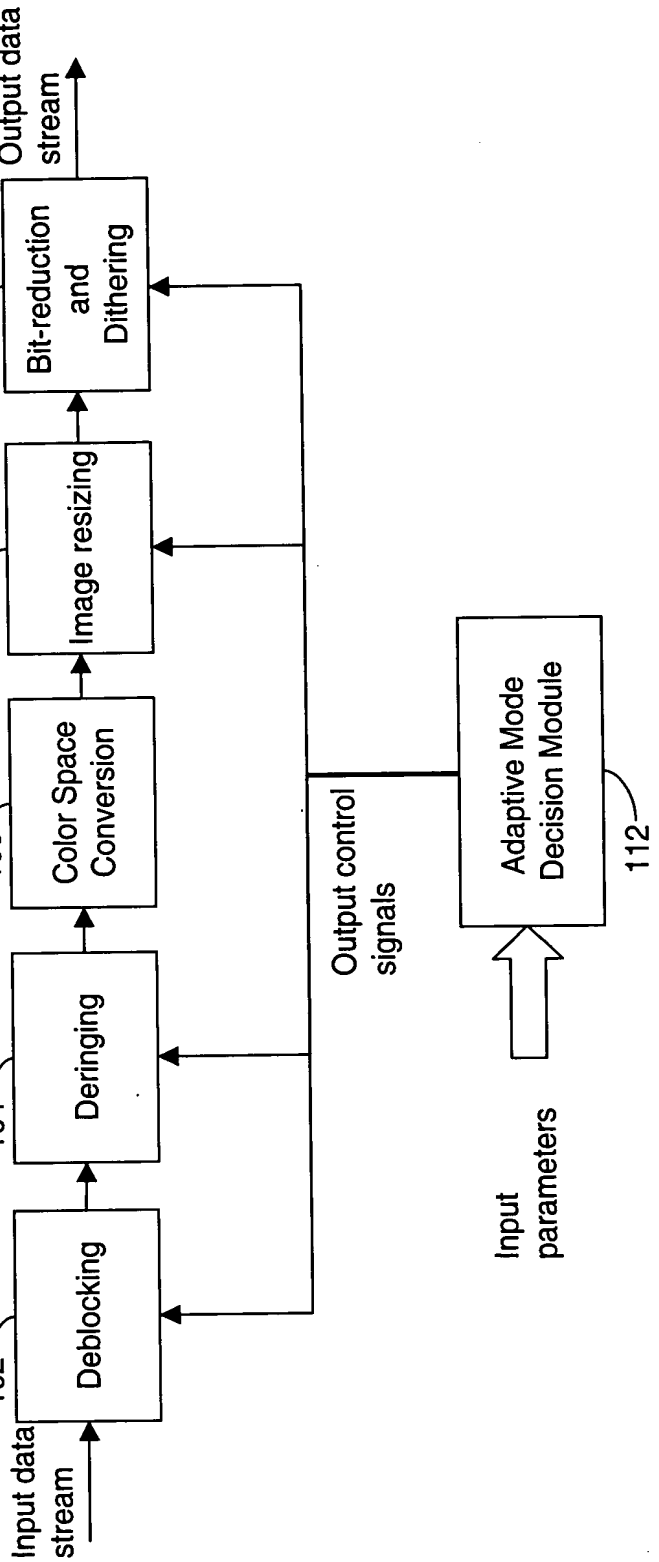
Input data stream
102
Deblocking
104
Deringing
106
Color Space Conversion
108
Image resizing
110
Bit-reduction and Dithering
Output data stream
Output control signals
Adaptive Mode Decision Module
112
Input parameters

FIG. 1

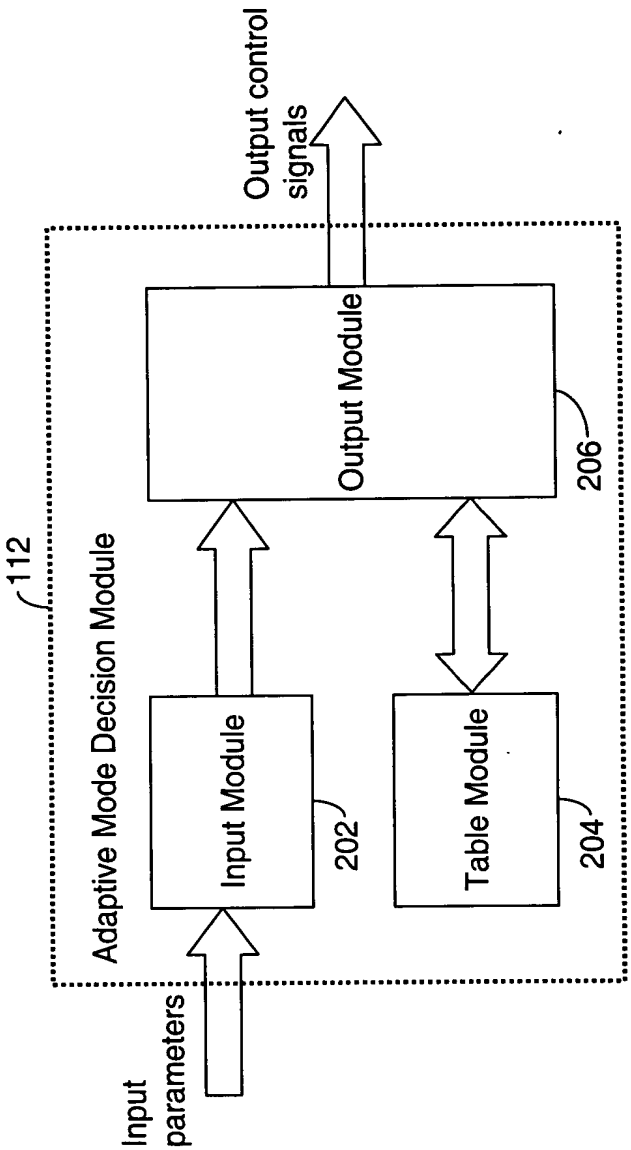
Output control signals
Adaptive Mode Decision Module
112
Output Module
206
Input Module
202
Table Module
204
Input parameters

FIG. 2

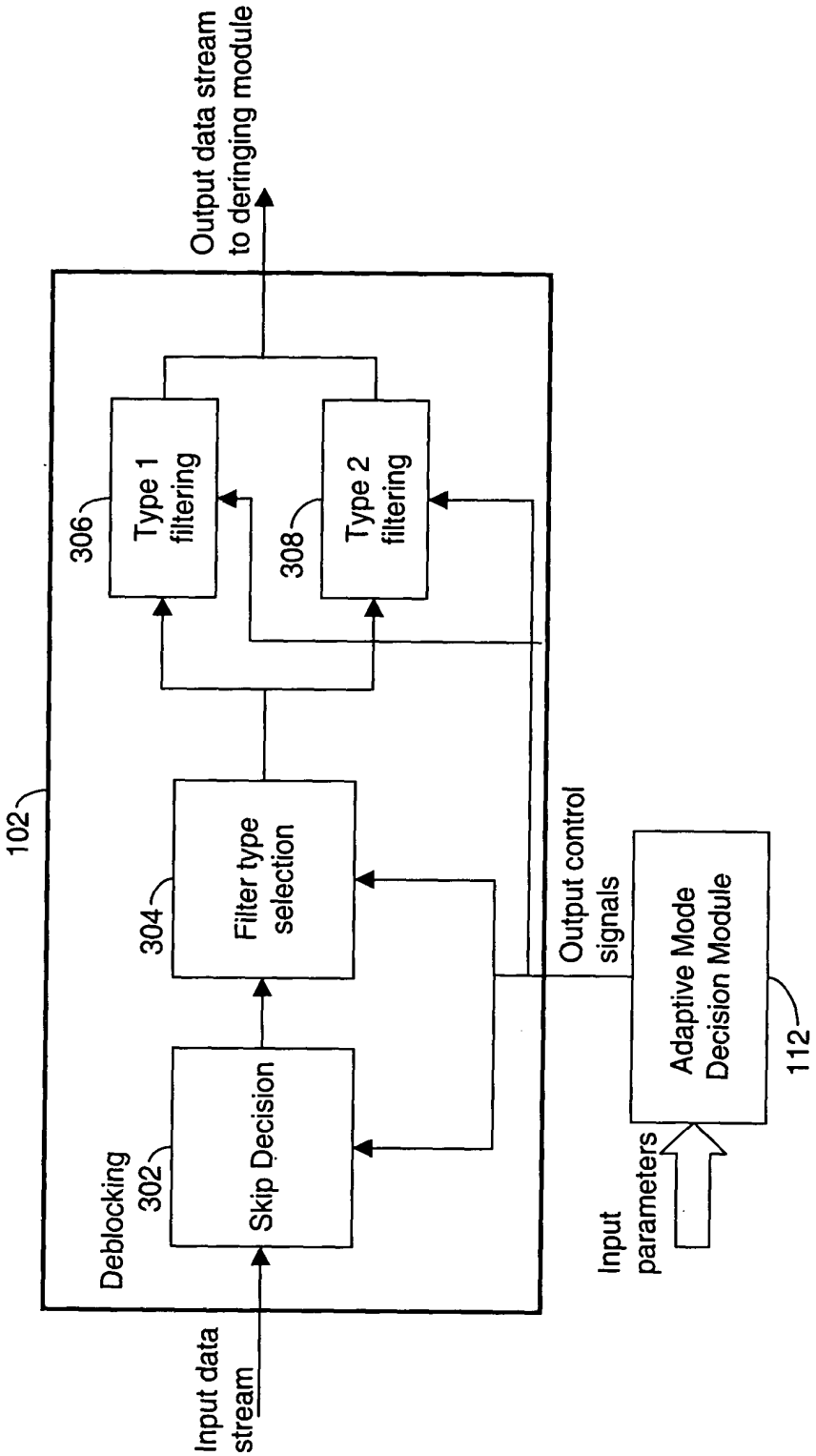
Output data stream to deringing module
Type 1 filtering
306
Type 2 filtering
308
102
Filter type selection
304
Output control signals
Adaptive Mode Decision Module
112
Deblocking
302
Skip Decision
Input parameters
Input data stream

FIG. 3

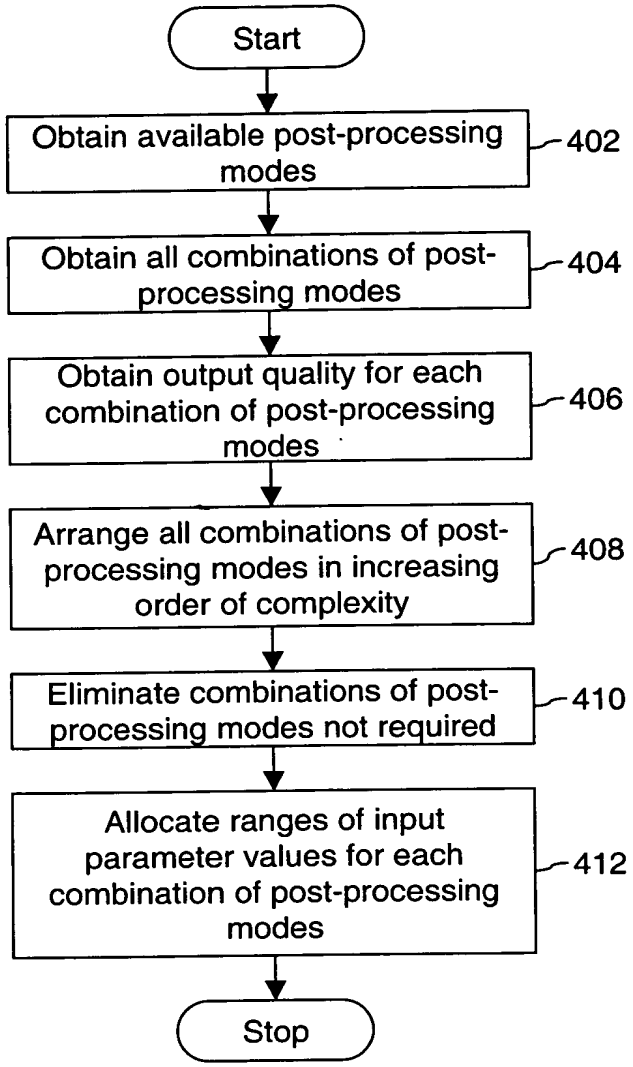
Start
Obtain available post-processing modes
402
Obtain all combinations of post-processing modes
404
Obtain output quality for each combination of post-processing modes
406
Arrange all combinations of post-processing modes in increasing order of complexity
408
Eliminate combinations of post-processing modes not required
410
Allocate ranges of input parameter values for each combination of post-processing modes
412
Stop

FIG. 4

502	504	506	508	510	512	514	516
Remaining Battery Power (RBP)	Skip Decision	Filter Type Selection	Type 1 Filtering	Type 2 Filtering	Deringing	Image Resizing	Bit-reduction and Dithering
RBP≥ Thr1	On	High Complexity	Filter 1	Filter 2	High Complexity	High Complexity	On
Thr1> RBP≥ Thr2	On	High Complexity	Filter 1	Filter 2	Low Complexity	Low Complexity	Bypass
Thr2> RBP≥ Thr3	On	Low Complexity	Filter 1A	Filter 2A	Bypass	Low Complexity	Bypass
Thr3> RBP≥ Thr4	On	Bypass	Filter 1A	Filter 2A	Bypass	Low Complexity	Bypass
RBP< Thr4	Bypass	Bypass	Bypass	Bypass	Bypass	Low Complexity	Bypass

FIG. 5

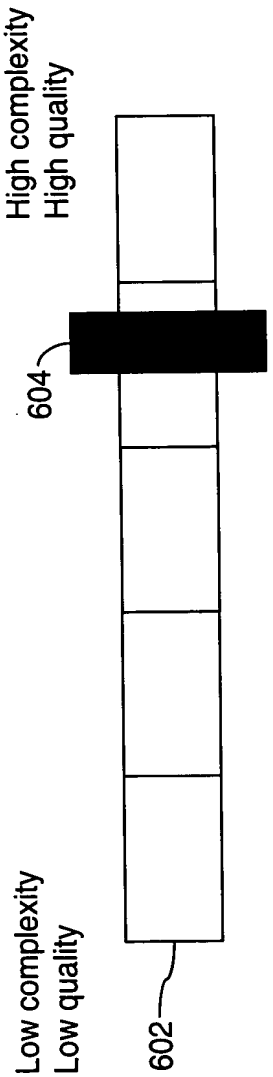
High complexity
High quality
604
Low complexity
Low quality
602

FIG. 6

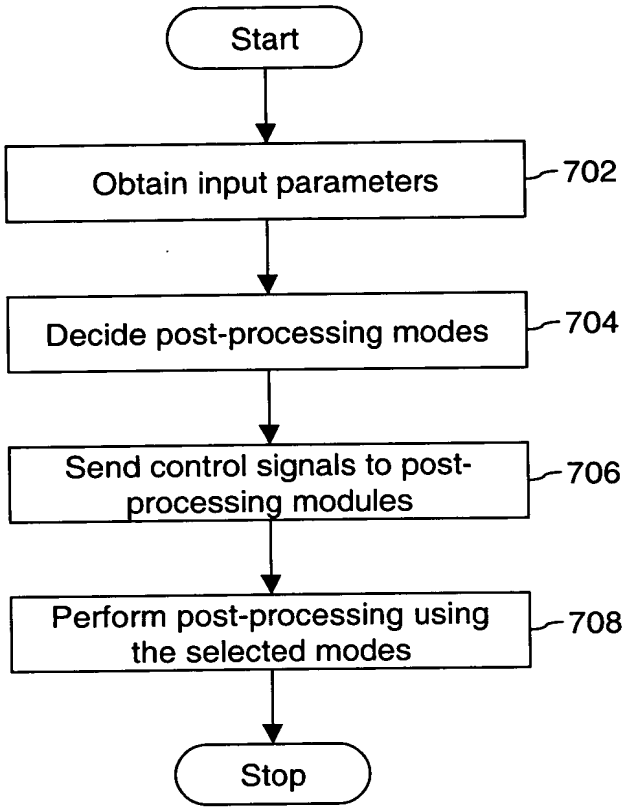
Start
Obtain input parameters
702
Decide post-processing modes
704
Send control signals to post-processing modules
706
Perform post-processing using the selected modes
708
Stop

FIG. 7